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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,170	02/14/2000	Kenji Hashimoto	04329.2230	6174

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WASHINGTON, DC 20005

EXAMINER

DAVIS, ROBERT B

ART UNIT	PAPER NUMBER
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1722

11

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/503,170

Applicant(s)

HASHIMOTO, KENJI

Examiner

Robert B. Davis

Art Unit

1722

-- Th MAILING DATE of this communication appears on the cov r sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 18 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) 15 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Suggestions

2. It is suggested that "protection" on line 1 of claim 8 be amended to read "protective" as stated in the originally filed claim. This is discretionary, as the meaning of the claim will not change.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawakami et al (5,145,691: figures 2 and 3; column 3, lines 36-47; column 4, lines 3-20; column 4, line 67 to column 5, line 9; and column 6, lines 1-6 and 34-37).

Kawakami et al teach an apparatus for applying material to a circuit board comprising: a retaining section for the circuit board which is frame (9), a mask (13) set on top of the circuit having holes corresponding to the holes of the circuit board as shown in figures 1-3, an extruding section (19, 17, 20) for extruding material into the hole of the mask, a first drive section for the extruding section (column 4, lines 3-9), a squeegee (29) for removing excess material from the mask and circuit board (column 5, lines 3-9), wherein the squeegee is attached to the extruding section and driven by the

same driving means. This is clearly intended to be covered by claim 1 as evidenced by claim 5, which states that, the first and second drives are the same. The retaining means is capable of retaining a semiconductor element as such is merely intended usage.

5. Claims 1-4 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin et al (5,587,342: figures 3 and 5).

Lin et al teach a retaining means for a semiconductor device (10), a means for forming a drop of material in a hole in a mask (15) as disclosed in lines 1-9 of column 4, and a squeegee (40) for removing excess material. The means to move the drop supplying device and the squeegee are inherent as required for operability of the apparatus.

6. Claims 1-4, 8-11 and 21-26 are rejected under 35 U.S.C. 102(b) as being anticipated by applicant's admitted prior art (see figures 1, 2 and 3a-3d, and page 2, line 10 to line 10 of page 6 of the instant application).

The admitted prior art teaches a retaining section (12) for supporting a semiconductor device, a mask (13) set on the semiconductor device, the mask having openings (14) corresponding to the portion of the semiconductor device to be coated, an extruding section (2) for extruding a fluidizing resin (1), a first drive section (4) which drives the extruding section, a squeegee (16) which causes movement of the fluidizing resin over the openings (14) as illustrated in figures 3b-3d, and a second drive section (18) for driving the squeegee which is independent from the first drive. The fact that the extruding section extrudes resin onto the mask and not into the opening is intended use

and does not affect the patentability of the apparatus claims as the structure of the admitted prior art is capable of extruding resin into the openings.

Response to Arguments

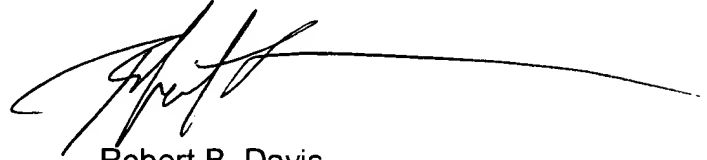
7. Applicant's arguments filed April 24, 2003 have been fully considered but they are not persuasive. Applicant argues that claims 1 and 8 contain allowable subject matter because these claims recite first and second drives for the extruding section and the squeegee, respectively, as Kawakami et al teach one single drive to move both the extruding section and the squeegee. This is not persuasive because applicant claims two different species. Claim 5 recites that the first and second drive are the same drive. Claim 1 is generic to species of claim 5 and the species of claims 21 and 22. Since claim 5 is dependent upon claim 1 and claim 21 is dependent upon claim 1 that claim 1 is generic to both species. Kawakami et al clearly teach the drive arrangement of claim 5 and therefore claim 1 as well.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 703-308-2625. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read 'R. Davis', with a long horizontal flourish extending to the right.

Robert B. Davis
Primary Examiner
Art Unit 1722

5/6/03

May 6, 2003